

receive a notification request from one of a plurality of subsystems in said router device, wherein said notification request is a request to receive notification of changes to configuration data of an object in said network, and

store an identification of said one of said plurality of subsystems in a record for said configuration data for said object identifying said one of said plurality of subsystems as requiring notification of changes to said configuration data of said object; and

a media readable by said processing unit that stores said instructions.

20. The product of claim 19 wherein said instructions further comprise:
instructions for directing said processing unit to:

receive a change in said configuration data of said object,

read said identification of said one of said plurality of subsystems from said record of said object receiving to receiving said change of said configuration data, and

transmit a notification of said change of configuration data of said object to said one of said plurality of subsystems responsive to said reading of said identification.

21. The product of claim 19 wherein said instructions further comprise:

instructions for directing said processing unit to:

retrieve a record storing said configuration data for said object responsive
to receiving said notification request, and
set a notification flag in said record.

22. The product of claim 21 wherein said instructions further comprise:

instructions for directing said processing unit to:

CI
receive a change to said configuration data of said object,
retrieve said record of said object, and
read said notification flag.

23. The product of claim 21 wherein said instructions further comprise:

instructions for directing said processing unit to:

determine said notification request is configuration data of a name space,
retrieve each child record of said record, and
set a notification flag in each said child record.

24. The product of said 23 wherein said instructions further comprise:

instructions for directing said processing unit to:

receive a change to configuration in a child record,

retrieve said child record responsive to receiving said change,

read said notification flag in said child record responsive to retrieving said record,

read a parent record of said child responsive to reading said notification flag, and

transmit notification of said change of said change to said one of said plurality of subsystems identified in said parent record.

25. The product of claim 19 wherein said instructions further comprise:

instructions for directing said processing unit to:

receive a remove notification request from said one of said plurality of subsystems, wherein said remove notification request is a request to remove said one of said plurality of subsystems from said plurality of subsystems to be notified in response to a change in said configuration data, and

remove said identification of said one of said plurality of subsystems from said record of said configuration data storing subsystems to be notified of a change in said configuration data.

26. The product of claim 25 wherein said instructions further comprise:
instructions for directing said processing unit to:

determine whether said configuration data for which said remove notification request is for a name space,

retrieve each child record of said record of said configuration data responsive to a determination said configuration data is a name space, and

remove a notification flag from each said child record.

- Sub 27. A method for providing a configuration database subsystem that maintains configuration data for objects in a network for a router device comprising:

maintaining a configuration database;

receiving a notification request from one of a plurality of subsystems in said router device, wherein said notification request is a request to receive notification of changes to configuration data of an object in said network; and

storing an identification of said one of said plurality of subsystems in a record for

said configuration data for said object identifying said one of said plurality of subsystems as requiring notification of changes to said configuration data of said object.

28. The method of claim 27 further comprising:

receiving a change in said configuration data of said object;

reading said identification of said one of said plurality of subsystems from said record of said object receiving to receiving said change of said configuration data; and

transmitting a notification of said change of configuration data of said object to said one of said plurality of subsystems responsive to said reading of said identification.

29. The method of claim 27 further comprising:

retrieving a record storing said configuration data for said object responsive to receiving said notification request; and

setting a notification flag in said record.

30. The method of claim 29 further comprising:

receiving a change to said configuration data of said object;

retrieving said record of said object; and

reading said notification flag.

31. The method of claim 29 further comprising:

determining said notification request is configuration data of a name space;

retrieving each child record of said record; and

setting a notification flag in each said child record.

32. The method of claim 31 further comprising:

receiving a change to configuration in a child record;

retrieving said child record responsive to receiving said change;

reading said notification flag in said child record responsive to retrieving said record;

reading a parent record of said child responsive to reading said notification flag;

and

transmitting notification of said change of said change to said one of said plurality of subsystems identified in said parent record.

33. The method of claim 27 further comprising:

receiving a remove notification request from said one of said plurality of subsystems, wherein said remove notification request is a request to remove said one of

said plurality of subsystems from said plurality of subsystems to be notified in response to a change in said configuration data; and

removing said identification of said one of said plurality of subsystems from said record of said configuration data storing subsystems to be notified of a change in said configuration data.

34. The method of claim 33 further comprising:

determining whether said configuration data for which said remove notification request is for a name space;


retrieving each child record of said record of said configuration data responsive to a determination said configuration data is a name space; and

removing a notification flag from each said child record.

Respectfully submitted,
SIERRA PATENT GROUP, LTD.

Dated: August 23, 2002

Sierra Patent Group
P.O. Box 6149
Stateline, NV 89449
(775) 586-9500


William P. Wilbar
Reg. No.: 43,265